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INDIANA FARMER & GARDENER.

Indianapolis, Saturday, June 14, 1845.

Collections and Recollections.

"Gather up the fragments . . . that nothing be lost."

In reading old and new books, periodical papers, and magazines, a vast number of facts or pleasing incidents pass under our notice, are marked, remembered, but seldom used, because their miscellaneous character seems to preclude their introduction into *set* articles. Under the title of COLLECTIONS AND RECOLLECTIONS we design to write out, in brief form, such of these as will be most interesting or useful. Some few in foreign periodicals we shall simply *transfer*.

A REMARKABLE TREE. There is an oak of magnificent dimensions standing in Sherwood forest, between Notingham and Mansfield, England, whose history is as follows:

The estate is that now universally known as *Newstead*. Lord Byron's grandfather being much embarrassed ordered all the trees that were saleable on his domain to be cut down. A certain Mr. Dodsworth, a wealthy attorney, had often passed and observed this tree, and, on hearing of his Lordships intention, went himself to Newstead and offered Lord Byron £50, ($244) for the tree; a legal agreement was speedily made, by which neither the present, or any future proprietor of Newstead, should have any right to cut down the tree. When it died, the land overshadowed by it was to revert to the Newstead estate. The agreement is regularly entered in the estate deeds. It is, probably, the only tree on earth, that *nobody* has a right to cut down. The tree is now preserved with great care Its branches measure 200 feet in circumference, its trunk four feet from ground, thirteen feet. I think the name of Mr. Dodsworth should be put on a tablet and preserved by the side of the Pilgrim Oak (now so called) which he thus saved.

TO PRESERVE GARDEN STICKS. It is desirable, when one has prepared good sticks for supporting carnations, roses, dahlias, &c. to preserve them from year to year. The following preparation will make them last a man's life time: When they are freshly made allow them to become thoroughly dry; then soak them in Linseed oil for some time, say two or three days. When taken out let them stand to dry till the oil is perfectly soaked in; then paint with two coats of verdigris paint. No wet can now penetrate.

WEEDS IN ALLEYS. It is said that weeds may be entirely destroyed for years by copious watering with a solution of lime and sulphur in boiling hot water. This if effectual, will be highly important to such as have garden gravel walks, pavements, &c., through which grass and weeds grow up.

The following method is pursued at the mint in Paris, with good effect: 10 gallons water, 20 lbs. quick lime and 2 lbs flour of sulphur are to be boiled in an iron vessel; after settling, the clear part is thrown off and used when needed. Care must be taken, for if it will destroy weeds it will just as certainly destroy edgings and border flowers if sprinkled on them. Weeds, thus treated, will disappear for several years.

ROSES GRAFTED ON CURRANTS. Every year or two this venerable folly takes a fresh start and travels the rounds of newspapers, that if a rose be grafted on a black currant, the flowers will be black. This notion was known at least as early as 1600, and those who believe in it, should try another project mentioned in the same old book containing this, (*Maison Rustique*) viz: grafting roses on the cabbage stalk to obtain green flowers! He that believes such apochryphal tales will be

disappointed. Grafting and budding can only be successfully practiced between nearly related plants. Roses have been made to *take* on the oak. The ancient agricultural writers (Pliny, Varro, Columella, &c.) speak of apples and vines grafted on elms and poplars. Evelyn mentions that he saw, in Holland, roses growing on oranges. But every gardener knows that if such unnatural unions are found for a month or two, the graft speedily dies, and sometimes the stock also.

Species of the same genus may be grafted together and genera of the same natural family. Besides relationship, there should be similarity of habit between the two plants; the period of the movement of sap, and the development and fall of the leaf should be the same in each. The common walnut will not receive the late growing kinds well, because their sap begins to move at different times; the plantanus-leaved maple will not receive any other kind of maple; probably from a great difference in the quality of the sap, (*London.*)

The greatest feat of grafting on record, is that of Prof. Von Mons, of Brussels, who succeeded in grafting an entire tree, fifteen feet high, on the stump of another, of similar diameter.

DAHLIAS. A French writer on Horticulture says, that dahlias should not be manured until they begin to show buds. Then cover the soil all around them about two inches thick with rich manure. If the plant is manured during its first growth, the growth will be principally of the stem and leaf. But if applied as directed above, it will cause the flowers to be larger and finer.

One stem only should be allowed to sprout from the root, and when this attains a height of about two feet, the side shoots should be taken off about half way up from the bottom. These side shoots may be planted out in a shaded, moist place, and they will root and often flower the same summer.

NOTICES OF FOREST TIMBER. Much attention has been paid, and is still given in England to the planting of Forest trees. Some proprietors have set thousands of acres. The habits, qualities, and value of various trees have been much studied. Among many notices we glean some items worthy of attention. Gilpin, in his work on Forest Scenery, calls to oak the *Hercules* of the forest, and the ash, the *Venus*, the characteristic of one being strength, and of the other, elegance.

The *Beech* is pronounced by an English writer to be the most lovely of all forest trees on account of its smooth rind, its glossy foliage, its graceful pendulous boughs; for fuel it is said to be the best in that climate; and it is better able than any other to contend with western winds; its leaves, gathered before they are much frost bitten, afford the easiest and sweetest mattrasses in the world to lay under quilts instead of straw, and continue perfect for seven or eight years.

The *Spanish chestnut*, partaking the good qualities, as timber, of the oak, excels it in two respects—growing faster and the sap part being firmer. It thrives in all soils and sites. In Derbyshire (Eng.) many of them have fifty feet clear stem without a bough.

We recommend to the notice of nurserymen and of arboriculturists this tree. Loudon pronounces it to be "one of the most magnificent of European trees." It grows as lofty as the oak or even loftier, it is long lived and hardy, its leaves are not subject to insect depredations—it produces abundance of fruit. Beck says that the American species seem to be identical with the European, but the nuts of the Spanish chestnut, which we have seen, are as large as the American nut. In rich sandy soils its growth is very rapid and its size even larger than that of the oak.

The *Horse Chestnut*, (to which our *Buckeye* is nearly allied) came first from northern Asia to Constantinople, thence to Vienna, thence in 1615 to Paris, and in 1629 it was introduced to England.

The *Cypress*, is supposed to be the most durable of all timber, not excepting even the Cedar. The doors of St. Peter's church, at Rome, were formed of this material in the time of Constantine, and after a lapse of 1100 years, being taken down to make way for gates of brass, they showed no signs of decay.

All *Firs*, for timber, should be felled in summer, because they are then fullest of turpentine and heaviest.

GRASSES. In our last number Dr. Plummer gives an account of some English grasses. Reading some English scientific works since, we collected from them a few other items which may be added to the remarks of Dr. P.

Festuca pratensis, in deep rich soils, somewhat moist, it is considered as the most bulky and nutritive of all grasses; but in poorer soils it is equalled, if not surpassed, by the rye-grass (*Lolium perenne*) and the meadow fox-tail (*Alopecurus pratensis.*) The meadow fescue grows to the height of between two and three feet; but the sheep fescue (*F. Ovina*) seldom grows above six inches, or a foot in height, and is chiefly sown on sheep pastures or used to cover lawns and grassy surfaces to be mown in pleasure grounds. Both are natives of Great Britain.

Receipts for the Indiana Far. and Gard.

Although we give, of course, regular receipts, when requested, for our paper, we do not deem it necessary—inasmuch as we *do not send our paper to any who have not paid*, except in two cases, where we send it *gratuitously*, or when a special arrangement has been made. All who receive the Indiana Farmer and Gardener regularly, may understand, therefore, that they have *nothing to pay*, unless a special arrangment has been previously made with them as to an after payment.

To Friends of the Indiana Far. and Gard.

During the remainder of the year, we will receive *fifty cents*, as payment for the current volume, without regard to numbers of subscribers. This will be only for this volume. Our object is to obtain as wide a circulation as possible. During the first year

a paper like this, foregoes all profit, in the expenses necessary to bring it fully before the community and make it known. Wherever two, five or six have been obtained in a neighborhood, in attempts to form a club, postmasters may forward their names, and money, *taking fifty cents* as full payment.

☞ After our next number there will be *no postage* on the Indiana Farmer and Gardener to all within *thirty* miles of Indianapolis.

☞ We shall furnish *back* numbers in all cases, so long as they hold out, to new subscribers.

Plowing Corn.

Many farmers, because their fathers did so before them, plow their corn lands very shallow before planting; but make up for it in deep plowing while dressing the corn-crop. Why is corn plowed at all?

1. *To destroy weeds.* In this climate if a plow is not kept lively in the early part of the season, weeds will completely take the crop. The soil is like a table full of food. Every man who sits down to it makes it less. Every weed eats up a part of the soil, and takes away needlessly, so much from the corn. But it is not merely the nutritive ingredients which are extracted—but what, on some soils, in some seasons, is even worse—weeds drink up the moisture. There are many soils which could afford to lose much mineral and vegetable substance without lessening the supply for corn; but, in this climate, in ordinary seasons, no soil can afford to squander its moisture.

But a corn crop is often put in to act as a cleanser of the soil when it has become foul. This end can only be answered by a rigid persecution and destruction of the weeds throughout the whole growing season.—Some farmers, strangely enough, will deal thoroughly with their fields, but allow the edges and fence rows to swarm with weeds that luxuriate and ripen seed which the winds scatter all over the field. This is as if a man should busy himself all day long in driving hogs out of his field, but leave all the holes open where they broke in. The soil should be thoroughly worked,

2. *To prevent dryness.* Nothing is wider of the truth, than letting corn alone in dry weather for fear of 'firing' it. If the plow begins early, and is kept going, no drought likely to occur in our climate, can do much injury; especially if the ground has been broken up deep before planting.

Where the atmosphere is very dry, very hot, and windy, the evaporation of moisture from the plant, and from the surface of the soil is excessive. A hill of corn will exhale many pounds of moisture in a day. There is no remedy for excessive exhalation from plants;--but this renders it yet more necessary that a supply should be kept up at the roots. If the soil therefore, is permitted to evaporate from its surface, the double draft upon its moisture—through the plant, and from the surface—will soon exhaust its water.

Every body knows that if a board or cloth be put upon the ground, in dry weather, the earth under it will remain moist—its aqueous particles being checked in their passage upward. If a shovel full of fine manure be laid in a heap upon a spot of ground, the same effect will be produced. Gardeners are accustomed to cover the earth about shrubs with an inch or two of fine sand;—experience teaching them that it preserves the moisture of the soil. Now, if the soil, instead of being covered with sand, or light manure, be itself pulverised, the same effect will be produced—and for reasons which will appear. When the soil is compact the moisture ascends from particle to particle without obstruction. Every crevice which separates the particles of earth, checks the passage of the moisture. This may be more readily seen in an analogous case,—the transmission of heat. Take two nail rods, lay the end of one in the fire;—divide the other into inch pieces and lay them in a row from the fire, each piece touching the other. The transmission of heat in the rod made up of pieces will be checked at each point of division, while the uncut rod will heat rapidly. On this principle, an iron chain two feet long, with one end thrust into fire will not transmit heat through its length near so soon as a solid bar of the same length.

If this reasoning be true, and experience bears it out, the plow should be kept running

in dry times to save a crop from drought. But if the farmer has neglected his corn, waiting for rain, and begins to plow after his ground is very dry, and plows deep, *breaking the roots* of his corn, the crop will be 'fired;' for, in this case, besides the evaporation from the leaves, and the dryness of the soil, he commences breaking the roots by which the crop drinks what little water there may be left for it. Of course it despairs when it is attacked on one side by the heat, and on the other by the foolish farmer, and underneath by a treacherously dry soil. Begin, then, early, and plow often, and you may defy dry summers and cram your cribs with hearty crops of corn.

Breaking the roots. — Many farmers study to break the roots of their corn. We have heard them boast of ripping them up with a big plow till they clogged it up like bundles of yarn. It is done by some because others do it; those who attempt to reason, say, that if a root be broken it immediately puts out many more from the point of breakage; and the practice of root pruning fruit trees is cited, to shew that the fruitfulness of a plant is increased by reducing the root and checking the growth of the wood. It is not true that the fruitfulness of a tree is increased by root pruning, but, it is made to yield its fruit *earlier*. It is a device to bring trees rapidly into bearing. A pear tree (grafted) requires from five to eight years before it is matured enough to commence bearing. By mutilation of root, bending of branches, or by a poor gravelly soil, the tree is partially forbidden to grow, and obliged to ripen its wood and fit it for fruit bearing. But had it grown to its natural size, it would, then, have borne even more fruit than when dwarfed.

No such practice is required upon annual plants, whose ripening is not delayed through years, but which come up and ripen and die within the limits of a single season. They need no artificial treatment to accelerate the fruiting, because it ordinarily makes no difference whether the corn crop comes in September or October. It is better to select varieties of corn which ripen within the limits of the season natural to the region where it is planted. Then there will be no occasion to break roots, or to apply any other artificial and violent process to accelerate muturation.

Long Roots, and Deep Plowing.

Cobbett says that the cucumber, in fine rich soil, sends out roots ten feet in length. Corn planted on a hill side has had its roots washed out by heavy rains, and they measured five feet in length. The onion will send its roots in a good soil two feet deep; Canada thistles have roots seven feet long; wheat, in a mellow soil, will send roots three feet downwards, and much further horizontally; oats about two feet.

Let every common-sense man ask whether, in preparing land for crops, it ought to be broken up deep or not. Common plowing gives an average depth of five inches; deep plowing about seven or eight; subsoil plowing from fifteen to twenty. In a field so plowed the roots are beyond the power of drought, and in a dry season, a crop of corn so cultivated would preach this doctrine of deep plowing better than any man could.

The wheat has suffered severely from drought this spring; but had the roots gone down into a mellow bed from twelve to eighteen inches below the surface, could the drought have been mischievous to the wheat? To be sure, deep plowing is laborious and much more slow than surface-scratching; but let the arable lands be divided, and a part, in succession, subsoiled each year, until the whole has been gone over. If it takes a good deal of labor, it will last long enough to pay for it twenty times over.

Hard Times.

Let those who imagine themselves to have been great sufferers by "hard times," read the copious extracts given in this number illustrating the condition of laborers on English farms. Our worst condition would be a paradise to them. *We* know nothing about suffering. What part of our people, at the greatest pinch, have been without, wheat, bacon, sugar, tea and coffee! without confortable dwellings and abundant clothing! A little more *real* suffering would cure much imaginary trouble: three or four hearty groans, would blow away whole gusts of

wishy-washy whinings. We are much more likely to suffer from the effeminacy of abundance than from the trials of want.

Weeds, Gardens.

After hot weather sets in, many are naturally inclined to relax their garden labors; they have eaten their salads, their radishes, and peas; their beans and corn require but little attention, and as for the rest, it is left to the company of weeds.

Weeds.—If the garden be thoroughly hoed twice or three times, the labor of keeping down weeds the rest of the summer will be small. We hope some of our readers will try the receipt given in another part of our paper for killing weeds in alleys. It is best to go over a compartment first with the hoe, to cut off weeds and loosen the soil; then with a rake go over it again, levelling and smoothing the surface and collecting the weeds into heaps, which should be wheeled to the manure-corner and left to decay. In raking, tread backward so that your tracks will be covered by the rake and the bed left even.

Among the most vexatious weeds may be mentioned the purselane (*Portulácca oleràcea*) commonly called pussly. It comes in May and lasts through the summer. One plant bears seed enough for a whole acre. It is very tenacious of life. The least bit of root, sprouts again; and, when rooted up, if a single fibre touches the soil, it starts off in full vigor. When boiled it furnishes a very palatable article of "greens." We go over the ground with a hoe, then rake it into heaps and wheel it to the barn yard. Hogs are fond of it, and it is said to fatten them well. It is somewhat amusing to those who are vexed at its insuperable intrusiveness, and its inevitable vigor, to hear English garden-books speaking of it as "somewhat tender;" of raising it on hot-beds; of drilling it in the open garden; of watering it in dry weather thrice a-week, and cutting it carefully so that it may sprout again! Cut it as you please, gentlemen! rake it into alleys, let an August sun scorch it, and if there is so much as a handful of dirt thrown *at it*, no fear but that it will sprout again. It is a vegetable type of immortality. The Jamestown weed (called jimpsum,) the Spanish needle, lambs-quarters, &c., are easily eradicated for the season by one or two hoeings. The grasses which infest gardens—spreading into a cultivated ground from the grass-plat, or brought in with manure—are easily weeded out if plucked while small; but if left, the long spreading roots tear up tender plants along with them.

It is said that, if no seeds were brought into the land by wind or manure, or growth, the stock of weeds might be eradicated in eight years. But so long as corners and fence edges are reserved as weed-nurseries, to furnish an annual supply of seed, no one need fear that gardening will become too easy from want of work.

We know of but two reasons for letting weeds grow to any size. In a large garden when all the ground is not to be planted at once, the reserved portions may be suffered to sprout all the weeds, and when six or eight inches high, if turned under, they will furnish good manure. Again, when cut-worms are very numerous, when tomatoes and cabbages have been set out on a clean compartment, we have lost from a half to two-thirds of the plants. If the weeds are kept down just about the hill, and permitted to grow, for a few weeks, between the rows, although it has a very slovenly look, it will save the cabbages, &c., by giving ample food to the cut-worm. When the plants grow tough in the stem the weeds may be lightly spaded in and the surface leveled with a rake.

Family Government.

"William! stop that noise, I say; *won't* you stop! Stop I tell you, or I'll slap your mouth."

William bawls a little louder.

"William, I tell you! ain't you going to stop! *Stop* I say! If you don't stop I'll whip you, sure."

William goes up a fifth, and beats time with his heels.

"I never saw such a child! he's got temper enough for a whole town, I'm sure he didn't get it from me. Why don't you be still! Whist. Wh-i-st. Come, come, be still, won't you! Stop; *stop;* STOP, I say!

Don't you see this—don't you see this stick? See here now," (cuts the air with the stick.)

William, more furious, kicks very manfully at his mother—grows redder in the face; lets out the last note, and begins to reel, and shake, and twist in a most spiteful manner.

"Come, William! come dear—that's a darling;—naughty William! come, that's a good boy; donty cry, p-o-o-r, little, fellow; sant ab-o-o-s-e you, sall eh! Ma's ittle man, want a piece of sooger! Ma's little boy got cramp, p-o-o-r little sick boy; &c. &c."

William wipes up, and minds, and eats his sugar, and stops.

After scene.—The minister is present and very nice talk is going on upon the necessity of governing children. "Too true," says mamma, "some people *will* give up to their children, and it ruins them; every child should be governed. But then it won't do to carry it *too* far; if one whips all the time it will break a child's spirit. One ought to mix kindness and firmness together in managing children."

"I think so," said the preacher," firmness first and then kindness."

"Yes sir, that's my practice exactly."

ORIGINAL CORRESPONDENCE.

For the Indiana Farmer and Gardener.

Transplanting Evergreens.

I take this method of answering the many inquiries concerning the best time and method of transplanting evergreens, such as white pine, red cedar, arbor vitæ, drooping spruce, &c. I have been engaged a considerable portion of my time for the last three years in the business, and I shall give the result of my own experience. I received, 24th of 5th month (May) 1842, a lot of white pine and red cedar trees and drooping spruce in boxes, standing with the natural earth about each tree, with but few exceptions; I transplanted them on the 26th and 27th of the same month. The red cedar, about four hundred in number, nearly all grew and did well, and about one-half of the white pine grew, and three-fifths of drooping spruce. I also received about four hundred American arbor vitæ, the 28th of the 6th month, in boxes, standing in good order, and transplanted in nursery on the 29th, and after transplanting (the trees averaging two feet in height) I drove down stakes lengthwise of the row, on which I placed boards and the branches of green trees, to shelter them from the hot sun, for the space of two weeks. The result was about eight in ten grew and did well. I received a box of tamerack trees whose average height was two feet; they were treated in the same manner, being planted on the 20th of 9th month. One hundred and five trees were transplanted on the 21st, and not more than one in twenty died. The tamarack is not an evergreen, and, consequently bears fall transplanting, so far as my experiments have gone. I received a lot of white pine and drooping spruce the 27th of 8th month; about one-half grew, being covered with boards as above, and frequently watered. I have moved evergreens at different times after the first of the 10th month with but poor success, and shall, in consequence, abandon the practice of fall transplanting. I received a box of evergreens of different kinds on the 5th of 9th month, about three hundred in number, principally fir trees, with a few large white pine and tamerack; the fir trees were in good order and seemed to do well; but the pine and tamerack were in poor order, owing to the difficulty of bringing from such a distance trees of so large sizes, they being mostly about eight feet high. These trees were taken in good condition from the earth and well packed, but owing to the distance they were brought and the delay on the way they did not reach me till very late in the month.

After the various and many experiments made in transplanting evergreens, I have come to the conclusion, as a general rule, to remove white pine in the early part of the season after frosts are over and the earth has become somewhat settled and warm; or in the latter part of the 7th or 1st of the 8th months as the season may be, as there is a cessation of growth at those times. In removing the white pine or drooping spruce, particular care should be taken not to break the earth from around the roots, for if the dirt fall off from around the roots and they become dry, it is very difficult to get them to grow; at least, I have not been able to cultivate one in ten that were thus situated. There is but little difficulty in removing red cedar if it is not done too late in the fall season, for I have removed them at all times during the summer in my own nursery, for the purpose of ascertaining the best time, and method of transplanting, and find that they will bear removing every month in the warm season of the year, but preference should be given to early spring-planting when it can be conveniently done.

G. MENDENHALL.

Richmond, Indiana.

Remarks.—The general impression that

evergreens are very difficult to transplant is not well founded if one will observe a few directions.

The best time for transplanting is when the tips begin to shew fresh growth in spring. This is exactly the reverse of directions in English books, which denounce spring, and enjoin fall transplanting—in the climate of England, doubtless with good reason; and it is a good illustration of the caution necessary before imitating, in our climate, the most skilful foreign practices.

Mr. Alldredge informs me that he has always totally lost all his fall transplantings; not saving ten in a hundred; and other men say they have had similar experience, and *it is a settled fact that fall transplanting of evergreens is bad practice.*

The best method of removing is to lift the plant with as many roots and fibres as possible. More care should be used in this respect than in the removal of fruit trees; indeed there is little risk when good roots are obtained and kept in a moist condition. In planting, the most successful operators that we have seen, mix about half and half common soil and old rotten wood from the forests, filling it in carefully about the roots and covering the surface with substances which will prevent too much evaporation of moisture, as, litter, decayed wood, sods grass side down, &c. &c.

The old wood employed should be thoroughly decomposed; and that of the hackberry, maple, and beech are preferred. The decayed wood of the black walnut and oak do not seem congenial to plants.

When large trees are to be removed it is often done with success in the winter, by opening a trench about the tree and permitting the ball of earth to freeze pretty thoroughly. The tree is then undermined and upon a sledge easily removed to its destination. The hole for its reception should have been dug while the ground was unfrozen, and it will be necessary to wait until it thaws before it can again be filled in about the tree.

Ed. Indiana Far. and Gard.

For the Indiana Farmer and Gardener.

Locust Seeds.

Will locust seeds, *gathered in winter*, germinate? Near the close of last winter (1845,) I collected 6500 seeds from the yet adhering pods; and subjecting them to the usual treatment of hot water, and then sowing them, find not more than four per cent. have vegetated. This was also about the proportion of seeds which swelled and whitened by the action of the water. As the winter was a mild one, and, perhaps, favorable to the preservation of seminal vitality, the result of my experiment does not augur well of locust seeds gathered in winter. J. T. P.

Seeds often lie over, and come up the second and even the third season. This is very common in the pits of stone fruits. We can think of no reason why locust seeds should deteriorate or lose in any degree their germinating qualities, even in the coldest winter.—*Ed.*

Butter.

For the Indiana Farmer and Gardener.

Mr. Editor:—In one of your late numbers I observe a long communication on the subject of making good butter. I agree with the writer, that in all departments cleanliness is essential, but, on reading it to my better half, she thought that half his communication might have been spared; for, she asked, did the writer suppose that any person *half so dirty* as the one he describes will read an agricultural paper? [Unanswerable, Mr. Market-man!—*Ed.*] I have had some experience in the business of butter making, having kept dairies, varying from five to fifty cows, and sold my butter in Philadelphia, Baltimore, Washington city, and Cincinnati markets; in all of which it at least stood fair.

I disagree with the writer as to *washing* butter. I am satisfied that it extracts the good flavor from it, and that it will not keep so well as when water is not used. We salt our butter the first working, and after it cools, say twelve hours, all the buttermilk and watery particles from the salt can be worked out, for doing which we had a triangular box made thus:

No. 1, box; 2, lever, two or three inches thick; 3, drip for milk, &c., to run off; that corner to be lower than the rest; 4, pivot for lever to work in. We had butter, three weeks since about seven months old, that I should have been willing to put on "Market Man's" table with some of his butter at two weeks old, washed in working, for comparison. I would ask him, or any other,

to try an experiment, by taking three pounds of butter made without having any water come in contact with it, put one pound in ice-water, one in cold spring water for, say, two hours, then expose them all to the same temperature for a few hours, and they will be able to answer a question I was asked one morning while attending Washington market, by an old butter maker who came and stood by my tub: "Why is it, that my butter, which I took out of a cold spring since daylight, is so soft that I can hardly keep it in my tub, while your's, which must have been out almost all night, is as firm as a rock?"

I would wish them to keep the pounds separately, but in the same way, for a month, and then try them.

I would ask, is there not a circulation of the fluids in timber at all times when the wood is not frozen?

I was in hopes we would have had your views on the potato before this time. I shall plant, perhaps, fifty bushels this season, and wish all the information I can get on the subject. Perhaps you may hear from my crop.

It never occurred to me till lately, in what way the making hills like sugar loaves originated. I now have no doubt that it was useful before the potato became acclimated in a northern latitude, but now that it is, I think it worse than useless.

D. EMBREE.

REMARKS.—On receiving the above we conferred with the "better half" (physically, however, not one-fourth of him) of our correspondent "Market-man," and she says that when butter is to be immediately used, she prefers washing it; but if it is to be kept any length of time it should not be washed. But we leave any remarks to the parties concerned, hoping to hear from "Market-man."

In reply to the question on the motion of sap, I reply that it *does* move every month of the year, except when torpid from severe cold. Through the winter, the roots slowly draw in moisture, which is stored throughout the vegetable system, and every part is filled ready for spring. It is supposed that this accounts for the sudden and almost miraculous vernal growth in extreme northern latitudes, when a day or two changes a bleak, barren forest to perfect verdure. The length of winter enables the tree to gather stores of sap for its spring work. The *motion* of sap in winter is a mere impletion of the system; the *flow* of sap in summer differs, being a part of a circulation.

In evergreens the leaves also perform their functions through the winter, but much more slowly and languidly than in other seasons.

Ed. Indiana Far. and Gard.

For the Indiana Farmer and Gardener.

Cucumber and the Bug.

MR. EDITOR: I saw in the Indiana Farmer and Gardener of the 31st of May, an article headed "*Cucumbers—Yellow Bug,*" and was pleased in the expectation of finding a remedy that possibly might be *the* thing to repel these little depredators. I had the more faith in its efficacy, as it appeared over the signature of J. T. P., a gentleman well known to the agricultural world. Now, I had not patience to go home for a bottle, (it being near sun-set,) but borrowed one—had it filled full with turpentine, and home I trudged to test its usefulness. Having no clay at hand—supposing any retentive substance would be as good—I took from an old quilt a quantity of cotton batting, cut it into pieces about three by five inches, put them into a deep dish, and poured the turpentine on them until the cotton was thoroughly saturated; then out I went to the cucumbers, and exultingly saying, with a shake of the head, "You'll walk Spanish now, you little striped rascals." I then opened the vines and placed a piece of cotton in each hill.

The yellow striped bugs at this time, (June 2d,) were very numerous. The next morning, when I visited my vines, the bugs were running and flying about as "lively as crickets," it did'nt incommode them in the least. They gave no indication that their sense of smell was very acute.

I was not a little disconcerted at this, especially when I saw many vines prostrate, and others mere skeletons of what they had been. I then put in practice what I believe to be *the* best remedy after all,—in the shape of a pair of pinchers, composed of the thumb and fore-finger of the right hand;—and in the space of fifteen minutes, I thinned their ranks considerably. A great many, however, escaped by flight.

Not satisfied with the trial I had made with the Doctor's specific, at the close of the day I took my bottle of turpentine out, and again filled the cotton. To make sure work this time, I poured it in spots upon the ground, among the vines.

The following day having been called away, before I got time to "visit my patients," the sun was so high that its influence was sensibly felt. Imagine my surprise when I found the bugs as plenty as the "locusts of Egypt." I then gave up in despair, and

concluded to let the whole "go by the board." I took up the pieces of cotton, and whew! under the first piece there was about a dozen bugs, who had dodged from observation, not unlike so many loafers skulking behind the screen in a coffee-house.

I have tried many "remedies" and "preventives" for these annual, but to the gardener, unwelcome visiters, and the only "infallible remedy" I have ever met with, is in possession of every man, woman, and child; this is no other than the thumb and fore-finger, above mentioned.

It may be that the olfactories of the striped bugs, your correspondent has been "practicing" on, are more sensitive than the bugs hereabouts; for I can assure him that the little striped fellows in this section of Indiana, are perfect Hoosiers, and are not to be backed out by trifles.

From about two hundred plants of the cucumber, which were up and doing well a few days since, I think there may be fifteen or twenty left.

I intend to re-plant so soon as the "*sign in the moon is right;*" for the old women (at least some of them,) say there is a particular time to plant to make bottoms, and to plant to make tops or fruit; and although "all signs fail in dry times," still, I am almost inclined to side in with the old ladies. What will J. T. P. say to this? It may be he believes in "signs" too. Yours, &c. M.

Frosts.

Through the whole month of May we were visited with frosts. Those of the 7th and 8th were severe in this region; but those of the 27th and 28th were slight and not injurious. In Ohio, and throughout the east these last frosts were very destructive, as will be seen in the extracts given.

On Thursday night last, a sharp frost was experienced in this vicinity. So cold was it, that ice was formed and stood until some time after sunrise on Friday morning. It is thought the fruit has been very much injured, and in many places completely destroyed.—*Bradford* (*Vt.*) *Argus*, *May* 31.

It snowed very pleasantly in and about Carbondale last Sunday; and on Monday and Tuesday succeeding the cold was stiff enough to bear up an egg. Thursday night brought a severe frost, which we fear has killed our fruit for the third successive year in this section. Our village gardens looked "downcast" yesterday in consequence. Water was frozen about one-sixteenth of an inch!—*Carbondale* (*Pa.*) *Mirror*, *May* 31.

The ground froze last night in our neighborhood, and the way it punished the pumpkin vines that had been so imprudent as to thrust their heads above the earth, is ominous of a short crop of pumpkin pies.—*Nashua* (*Mass.*) *Telegraph*, *Saturday*, *May* 30.

We learn that the frost on Friday night was exceedingly destructive to early vegetation. In many places in the interior and in New Hampshire and Maine, Corn, Beans and Tomatoes were cut off.—*Bost. Jour.* *May* 30.

This season, thus far, nearly resembles that of 1816, when there was frost almost, or quite, throughout the United States every month in the year. On Saturday and Sunday nights last there was quite a hoar frost in this vicinity. The sun seems to have but little power, even at meridian.—*Charleston* (*Va.*) *Republican*, *May* 28.

In this section of country the crops, and vegetation generally, have suffered very great injury from the recent frosts and dry weather. The wheat fields, especially in low grounds and along our water courses, wear a truly unpromising appearance, having been badly frost bitten. The corn crop, too, has sustained material injury from the frosts, being in some instances cut off level with the ground; and the crops of oats and grass will be very light to all present appearances. There will be but little fruit of any kind. On the 20th, we were visited with another severe frost, the mercury at 5 o'clock standing 6 degrees below freezing point.—The additional injury to the crops must certainly be great.—*Guernsey* (*O.*) *Times.*

There was a severe frost, accompanied with ice a quarter of an inch thick experienced in this neighborhood on Thursday night. Much anxiety is felt for the fruit.—*Cooperstown* (*N. Y.*) *Republican*, *June* 2*d.*

The Cincinnati Gazette, of June 4th, says:

We learn from a friend who has just crossed the State from Toledo to this city, that the appearance of the country north of the National road, and, in some instances, this side of it, is desolate in the extreme. What the long drought had left of vegetation recent frosts have taken off. All that has appeared in the newspapers, within two or three weeks, concerning the destruction of crops he saw verified. At Toledo, on Thursday night 29th ult. ice froze to the thickness of three-eighths of an inch.

Review of Colman's European Agriculture.

The tenure of land and the condition of the farming population in England are so totally different from our own, that Mr. Colman has devoted, (as every one must who would convey a thorough knowledge of this portion of English husbandry) two long chapters to the subject.

The soil of Great Britain is almost never owned in fee simple by those who labor upon it. Their *real* farmers do not own their farms. The ownership of the soil lies in comparatively few, and they, either lords or men who have amassed immense fortunes.

The farming population is divided into three class—the landlord, the tenant farmer, and the laborer.

1st. *The Landlords; Rents; and Taxes.*—The landlord is the owner of the soil. Most of the landlords are noblemen or gentlemen, and are looked up to with a deference and veneration, on account of their rank with which those of us who have been educated in a condition of society where titles and ranks are unknown, find it difficult to sympathize. They own the land. Some few of them keep portions of their vast territories in their own occupation, and under their own management; but, by most of them, their lands are leased in farms of different sizes, seldom less than three or four hunderd acres, and in many cases eight hundred, a thousand, and twelve hundred acres. The rent of land varies in different places; in some being as low as five shillings; in others rising to almost as many pounds. Rents are in general paid in money. Sometimes they are valued in kind; that is, the tenant engaging to pay so many bushels of wheat, or so many bushels of barley, or such amount of other products; but in these cases, also, the landlord usually receives his rent in money according to the current prices of these articles. The rents are paid in semi-annual payments. The fair rent of land is sometimes estimated at a third of its products; by some, a different rule is adopted, which is, after all the expenses of cultivation and the usual assessments are deducted from the gross proceeds, that the balance remaining should be divided equally between the landlord and the tenant. In general, however, as far as my observation has extended, the rate of rent was not determined by any particular rule, other than that which prevails in most commercial transactions, that each party makes the best bargain for himself that he is able. It is only just to add that in all these cases, without exception, which have come under my remark, there has seemed to me, on the part of the landlords, the highest measure of liberality; the rents in general bearing a small proportion to the legal interest of the money at which the lands are valued, and for which they could be sold at once; lands costing £60 sterling, or 300 dollars per acre, being frequently let for 30s. or £2 sterling per acre, that is less than eight or ten dollars per acre. We are not well satisfied in the United States with a return from our land under five or six per cent. on its cost; but the landlords here seldom obtain more than two and a half per cent. or three per cent. on the price which the land would command, if brought into the market. The low rents which are obtained show the abundance of wealth, and how greatly an investment in land is valued for its security; and the active competition for leases, which appears in almost every part of the country when farms are to be let, seems to imply that the rents are reasonable, and, more than that, liberal. As I shall not hesitate to put down my impressions of the country, of men and things, with the utmost frankness, avoiding all personalities, I must say that there has appeared to me on the part of the landowners, with many of whom, among the largest in the country, I have had the pleasure of becoming acquainted, the most marked liberality in the management of their great estates, both in the terms and continuance of their leases, and in the aid rendered to their tenants in making improvements.

There is no great difference in rent, according to Mr. Colman's own shewing. In England money yields from three to five per cent. interest, and lands two and a half or three. In the United States money yields from six to eight per cent. and lands from five to six. Lands then rent in both countries at about the same rate, compared with the worth of cash capital. It is not the absolute difference of landed rents in the two countries to which we should look, but the relative difference in each, between interest on real estate and the interest on cash funds.—*Ed.*

"2. *The Farmers.*—Next come the farmers, who lease the land of the land owners. These men are not like farmers in the United States, who themselves labor in the field; they rarely do any personal labor whatever. They are, in general, a substantial and well-informed body of men; and many of them live in a style of elegance and fashion. Many of them are persons of considerable property, as indeed they must be in order to manage the farms which they undertake. The capital necessary to manage a stock or an arable farm must be always estimated at double or treble the amount of rent; and, in general, cannot be set down at less than £10 sterling, or 50 dollars, per acre. The stock required for a grazing farm is, of course, much more than for an arable farm; but in no case can success be hoped for without ample means of outlay. In no respect does the agricul-

ture of England differ more from that of the United States, especially from that of the northern States, than in that of capital. Our farmers, in general, have very little floating capital. They attempt to get along with the least possible expenditure. Under such circumstances they operate to very great disadvantage. They can never wait for a market. They cannot bring out the capabilities of their farms; and the results of their farming are consequently limited and meagre. The difference between a new country contending, as it were, for existence, and an old country operating with the accumulations of years and centuries, is most sensibly marked; the expenses incurred on some farms in England solely for manures purchased, exceeding thousands of pounds sterling, and the cost merely of grass seeds, are perfectly surprising to an American farmer; yet experience has demonstrated that, in these cases, the most liberal outlay of capital is the most sure to be followed by successful results."

The English farmer, here mentioned, is the most favorable specimen of the agricultural population, and it is to *him*, and not to the laborer under him, that reference is made in songs, novels, travels, &c., as the sturdy, jolly farmer.

A little more intimate acquaintance with this portion of the English people may be drawn from some of their own writers. Take Howitt's description, for example. p 96.

That the farmers are as intelligent as a parallel grade of society in large towns I do not mean to assert; that they are as truly aware of, and as united to defend, their real interests, I will assert as little. Their solitary and isolated mode of existence weighs against them in these points; but that they have generally a sounder morality than a similar class of townsmen is indisputable. They have a simplicity of mind as well as manners that is more than an equivalent for the polish and conventional customs of society, and with this a cordiality that is very delightful, and very rarely now to be found—the good, homely heartedness of Old English days.

They, indeed, so vividly enjoy the common blessings of life, from their vigorous health, and unvitiated appetites, as well as from the cravings of their inner being, finding their food in the daily communion with nature, instead of that book-knowledge which is so extensively diffused through all classes of the city, and which, too commonly, while it quickens the intellect and widens the sphere of observation, I am sorry to say, deadens the human sympathies and distorts the heart—that they make so much of their kindness appear in heaping upon you bodily comforts and refreshments as is often truly ludicrous. They would have you eat and drink for ever. One meal succeeds to another with a profusion and an importunity of hospitality that are overwhelming. They eat their bread with a sweetness and a capacity, generated by their active and laborious habits, that we, who lead more sedentary lives, and with minds and energies dissipated by a hundred objects unknown to them, have no idea of. People of all other classes place a great portion of their happiness in giving and eating great feasts; but a farmer seems to think all the good things of life are involved in feasting, and would feast you, not once a year, but every day, and all day long, if he could.

A recent authentic writer says that, with the exception of properties belonging to the church and to corporations and a few cottages in the neighborhood of large towns, there are not in England, in a population of 17,000,000, *twenty-five thousand landed proprietors!* You may travel through the country and not meet an owner of the soil once in fifty miles; there is in England no such class as our farmers—men who own the soil they cultivate; and, as might be expected, the laborers, absolutely dependent, are to the last degree servile and mean-spirited.—*Ed.*

"3. *The Agricultural Laborers.*—Next to the farmers come the laborers; and these three classes preserve the lines of distinction among them with as much caution and strictness, as they preserve the lines and boundaries of their estates. These distinctions strike a visiter from the United States with much force; but, in England, they have been so long established—are so interwoven in the texture of society—and men are, by education and habit, so trained in them, that their propriety or expediency is never matter of question. The nobleman will sometimes, as an act of courtesy and kindness, invite his tenant-farmer to his table; but such a visit is never expected to be returned. The farmer would under no circumstances invite the laborer to his table, or visit him as a friend or neighbor. I do not mean to imply that there is, on the part of the higher classes of society in England, any insolence or arrogance in their treatment of their inferiors. Free as my intercourse has been with the highest and the middle classes, I have seen no instance of this, nor anything approaching it, but the contrary; and the best bred men in the country—the true gen-

tlemen—are distinguished by their courtesy and the absence of all ostentatious pretensions.

"The farm laborer's are, I will not say in a degraded condition, for that would not, in any sense, apply to them, unless where, by their own bad habits, they may have degraded themselves; but they are in a very low condition, and extremely ignorant and servile. They rarely, as with us, live in the house of their employers, but either in cottages on the farm, or in a neighboring village. They are, usually, comfortably clad, in this respect contrasting most favorably with the mechanics and manufacturers in the cities and large towns; but they are, in general, very poorly fed. Their wages, compared with the wages of labor in the United States, are very low. The cash wages paid to them seldom equals the cash wages paid to laborers with us, and our laborers, in addition to their wages in money, have their board; but the English laborers are obliged to subsist themselves, with an occasional allowance, in some instances, of beer, in haying or harvesting. The division of labor among them is quite particular—a plowman being always a plowman, and almost inseparable from his horses; a ditcher, a ditcher; a shepherd, a shepherd only; the consequence of this is that what they do, they do extremely well. Their plowing, sowing, drilling, and ditching or draining, are executed with an admirable neatness and exactness; indeed, the lines of their work could not be more true and straight than they usually are, if they were measured with a marked scale, inch by inch. They speak of plowing and drilling or ridging by the inch or half inch; and the width of the furrow-slice, or the depth of the furrow, or the distances of the drills from each other, will be found to correspond, with remarkable precision, to the measurement designed. But they appear totally destitute of invention, and have, evidently, little skill or ingenuity, when called upon to apply themselves to a work different from that to which they have been accustomed. Their gait is very slow; and they seem, to me, to grow old quite early. The former circumstance explained itself to me when I examined and lifted the shoes which they are accustomed to wear, and which, when, in addition to being well charged with iron, they gather the usual amount of clay which adheres to them in heavy soils, furnish at least some reason why, like an Alexandrine verse, "they drag their slow length along." There are occasional instances of extraordinarily good management where they are enabled to accumulate small sums; but in no case, under the best exertions, can they make, from the wages of labor, anything like a provision for their old age and decay."

It is manifest to a moment's reflection, that the characters of men in this condition of life, will not depend upon themselves, since everything is cut out for them, and they are ruled by others' arrangements. Whenever a discreet and kind landlord employs them, he may make their condition happy, at least, but not enviable to any laborer in America, except the slave. On the other hand a bad master may reduce them to a worse condition than that of the horses which they drive.

The condition of laborers is very different in different portions of Great Britain. Indeed there is no common rule of treatment, but it depends on the custom of the district, or county, or even farm.—*Ed.*

"There are two practices in regard to agricultural labor, not universal, by any means, but prevailing in some parts of England and Scotland, which I may notice. The first is called the 'gang system.' In some places, owing to the size of farms being greatly extended, cottages being suffered to fall into decay and ruin, laborers have been congregated in villages, where have prevailed all the evils, physical and moral, which are naturally to be expected from a crowded population, shoved into small and inconvenient habitations, and subjected to innumerable privations. In this case the farmer keeps in permanent and steady employment no more laborers than are absolutely required for the constant and uninterrupted operations of the farm; and relies upon the obtaining of a large number of hands, or a gang, as it is termed, whenever any great job is to be accomplished, that he may be enabled to effect it at once and at the smallest expense. Under these circumstances he applies to a gang-master, as he is termed, who contracts for its execution, and through whom the poor laborers must find employment, if they find it at all; and upon whose terms they must work or get no work. The gang-master has them then completely in his power, taking care to provide well for himself in his own commissions, which must, of course, be deducted from the wages of the laborers, and subjecting them, at pleasure, to the most despotic and severe conditions. It is not optional with those poor creatures to say whether they will work or not, but whether they will work or die—they have no other resource—change their condition they cannot—contract separately for their labor they cannot, because the farmer confines his contracts to the gang-master; and we may infer from the reports of

the commissioners, laid before the government, that the system is one of oppression, cruelty, and plunder, and in every respect leading to gross immoralities. The distance to which these laborers go is often as much as five or six miles, and this usually on foot, and to return at night. Children and girls are compelled to go these distances, and consequently must rise very early in the morning and reach home at a very late hour at night. Girls and boys and young men and women work indiscriminately together. When the distance to which they go for work is ten miles, they are sent in carts. When the distances are great, they occasionally pass the night at the place of work, and then lodge in barns, or anywhere else indiscriminately together. To talk of morals in such a case is idle. One of the gang-masters, who has been an overseer seventeen years, gives it as his testimony, under oath, 'that seventy out of a hundred of the girls become prostitutes,' and the general account given of the operations of the system shows an utter profligacy of mind in their general conversation and manners, when morals must follow of course. If they go in the morning and stay only a little while, on account of rain, or other good cause, they are paid nothing. The day is divided into quarters, but no fractions of time are in any case allowed them. Then the persons employed are required, in many cases, to deal with the gang-master for the supplies they receive, in payment for their labor. The results of such a system are obvious. The work being taken by the piece, the gang-master presses them to their utmost strength. The fragments of days, in which work is done and not paid for to the laborers, are all to the benefit of the gang-master, who, in such case, gets a large amount of work done at no cost. These poor wretches, being unable to contract for themselves, or to get any work but through him, he of course determines the price of the labor, and, one may be sure, puts it down to the lowest point. But his advantages do not end here, for there is no doubt that he gets a high advance upon the goods which he requires them to purchase of him, and thus their wages are reduced still lower. No just or benevolent mind, it would seem, can look upon any such a system in all its details, as given in the commissioners' report, but with a profound sense of its injustice, oppression, and immorality.

"One of the gang-masters says, 'If they go to work two hours and a half, it is a quarter of a day. If they go a long walk, seven miles or so, and it comes on a wet day, there is the walk all for nothing. Children of the ages of four, five, and six, work in the gangs. They earn 9d. a day, the big ones; the small, 4d.; children of seven years old, 3d. a day.' 'It is the ruin of a girl,' says a parent, one of the laborers, 'to be in such a place as that.' 'My children's hands are so blistered,' says another of the parents, 'pulling turneps, that I have been obliged to tie them up every night this winter. Pulling turneps blisters the hands very much—they are obliged to pull them up—they must not take turnep crones (a sort of fork) for fear of damaging the turneps.'

"'The gangsman, or leader,' says another witness, 'pays the wages of all employed in the gang, and, of course, makes his profit entirely from their labor, as the farmer takes care that the gang system shall not cost him more than the common system of individual laborers. The leader's profit, as I have heard, is sometimes 15s. per day. The assembling of twenty-five and thirty women and children and lads, of all ages and conditions and characters, together, has a most fatal effect upon their morals and conduct.' Another respectable and reverend witness says. 'The gang is superintended by a lazy, idle fellow, of profligate manners and a dishonest character—such, at all events, are the characters of two in my own neighborhood.'

"I will not dwell upon the evils of a management of this kind. It is obvious what a power such a man, the employer of these people, has over them; and it is as easy to infer what is likely to be the character of young persons more especially placed under his control. When are men to be just? and when are men, who live upon the hard labor of others, and who hold not merely their physical but their moral destiny in their hands, to feel their responsibility as christians and as men?

"The most melancholy circumstance in the case is given in the testimony of one witness, a clergyman, who says, 'that he fears the gang system will and must increase, especially upon large farms.' It would not be unreasonable to fear that God would send blight and mildew upon fields where human life and virtue are thus sacrificed, and decency and morals thrown to the winds; and where the crops are watered with the tears of these wretched victims of injustice and oppression.

"There is another system of employment which prevails in Northumberland and in some parts of Scotland, to which I have already alluded: this is called the bondage system, but it does not appear to me liable to the strong objections which the name would seem to imply. In this case the laborer, when he contracts for his services, makes a condition that he will, as may be required, furnish a woman as an additional laborer;

and he receives so much per day for her labor, according to the number of days she may be employed. In such case, if he has not a wife or daughter to supply the place, he engages some young woman who lives in his family, and to whom he pays such a sum by the year as may be agreed upon, in money, clothing, or otherwise, and she lives in his family as one of the family for a whole year. There are few forms of servitude which are not liable to abuses, and the greater the state of dependence and weakness, so much increased is the liability to abuse; but where the employer is a conscientious and just man, such a contract may be mutually advantageous.

"In parts of Scotland what is called the Bothie system prevails, and the support of the laborers is a very summary process. The wages are paid in money or kind, as may be agreed upon; and the laborers, if single men, are furnished with a room, fuel and bedding; with two pecks of oat meal on Monday morning, and with a daily allowance of new or of sour milk--occasionally they may have beer and bread for dinner instead of the porridge. Nothing more, however, is done for them. They prepare their porridge for themselves in such way as they choose; but this comprehends the whole of their living. It would not be true to say that this diet is insufficient for the support of a laboring man, as it must be admitted that few laborers exhibit firmer health, or more muscular vigor, or really perform more work than many of these men. This mode of living would, however, I think, be a little too primitive for the New England taste, though on matters of taste we are told there is to be no dispute. Having myself visited a Scotch bothie, I cannot, how much soever the economy of the arrangements may be praised, very much commend the style of the housekeeping. Indeed it is not difficult to infer that where young men and others are turned into a hovel together, and without any one to look after their lodging or prepare their meals, the style of living cannot have the advantages even of the wigwam of a north American savage; for there, at least, there is a squaw to provide the food and look after the premises.* The wages of a Scotch laborer are about twelve pounds sterling per year, and living as above; and for a woman, as a field laborer, four shillings sterling per week, or about eighty-eight cents, out of which she provides for herself."

We give, here, extracts, without comment, illustrative of the condition of English common laborers. And let those who have bitterly complained of *hard times*, because a little pinched for a year or so, read and ponder.

"In an old country like England, where labor is so abundant, it is to be expected that the rules of labor should be exact and stringent; indeed, without this the management of a large farm would be impracticable. The women usually begin work at 8 o'clock, and, resting an hour for dinner, they work until five, or, in a pressure of work, until six. The plowman must feed and clean his horses at four o'clock in the morning, and at six o'clock the plow must be under way. At two o'clock his horses are put up for the day, and he devotes himself until six o'clock to their cleansing and feeding, and to the care of his plow and harness; eight hours in the field and the plowing an acre of ground, being considered a full day's work. The other laborers begin labor at six o'clock in the morning, and work until six in the afternoon, with the intermission of half an hour for breakfast and an hour for dinner. No laborer leaving his employment before the termination of his engagement, without good and sufficient reason, can recover any portion of his wages; and no employer, without equal reason, can dismiss a laborer before the end of the term for which he is engaged. In general, however, laborers continue for years in the same employment, especially married men; and it is extremely interesting, speaking well both for master and servant, to see master and servant, to see men and women, who have remained in the same service twenty, thirty, forty, and even fifty years, and their children coming forward to take their places. In such cases they become, as it were, an integral part of the establishment, and both parties are equally benefitted."

"The condition of the laboring agricultural class is certainly, in many parts of England, exceeding depressed; and though in frequent instances it may be called comfortable, in few that I have seen can it be considered prosperous. Their labor is not extraordinarily severe; they are by no means treated with unkindness, or, excepting thro' the misfortune of the ill temper of their employer, with severity; they are decently clad, and there is a great amount of active benevolence every where at work to assist them,

* Of the bothie system, as it is called, or employment of unmarried men, living together in a bothie or hovel attached to the steading, it is hardly necessary to say that a more effective means of demoralising and brutalising a peasantry could not be devised than that of crowding together a parcel of young men, half of them perhaps strangers, Irish, or bad characters, in a hovel by themselves, without even an attempt at moral superintendence. This is one of the worst evils that has attended the introduction of the large farm system.--*Laing's Prize Essay.*

and to alleviate their distress in sickness and misfortune. But they are very poorly fed; with many exceptions, they are wretchedly lodged; their wages are inadequate to their comfortable support—and their situation affords little or no hope of improvement—at least, the power of making it better does not rest, where it should, with themselves.

"It is a painful, though not an unheard of anomaly, that, in the midst of the greatest abundance of human food, immense numbers of those by whose labor this food is produced are actually suffering and perishing from hunger; that where ten millions of acres of improvable lands, capable of being made productive lands, lie uncultivated,* millions of lands, which might subdue, enrich, and beautify this waste, from necessity remain unemployed; and that in a country, where the accumulations of wealth surpass the visions of oriental splendor and magnificence, there exist, on the other hand, such contrasts of want, destitution, privation, and misery, as would surpass belief and defy the power of the imagination, but for the support of incontrovertible and overwhelming evidence. Under the present institutions of the country a perfect remedy is hopeless, and an alleviation of these evils is all which can be looked for."

"But, to my mind, it is obvious that no great improvement can take place in the character and condition of the laboring population while they remain a distinct and servile class without any power of rising above their condition. At present the most imaginative and sanguine see no probability of their rising above their condition, of being anything but laborers, or of belonging to any other than a servile and dependent class. The low state of their wages absolutely forbids the accumulation of any property. They cannot own any of the soil which they cultivate. The houses which they occupy belong not to themselves, and they may at any time be turned out of them. They must ask leave to live, or they must take it by violence or plunder when they will not be suffered to live. Their only home is the grave, and even their repose here is not always secure.

"In a country where labor is superabundant, and the price of land places it utterly beyond the reach of those who have no means to purchase but from the scanty products of their own manual labor, the condition of the laborer is that of absolute dependence. In a condition of society where artificial ranks and classes exist, and where all the wealth and all the power are in the possession of the upper, or, as they are sometimes denominated, the favored classes, the barriers which hem in the lowest class—without property, without power, without education, without even a home which they can call their own—are, of course, impassable. In a country where labor is scarce, where land is cheap and free, and where the advantages of a good education are offered gratuitously to all, where no arbitrary distinctions of rank exist, and every man by the force of his own talents and character may occupy that condition in society to which he chooses to aspire, it is obvious how different is the situation of the laboring portion, or, if so it may be denominated, the lowest *caste*.

"I believe it is impossible for a man who lives in a state of entire dependence upon others to have the spirit of a man; and who, in looking out upon the beautiful and productive earth, where God has placed him, is compelled to feel that there is not a foot of soil which, under any circumstances, he can claim for himself; that there is not a tree nor a shelving rock by the road side, where he can shelter himself and gather under his wing the little ones whom God may have cast upon his care, but he is liable to be driven away at the will of another—at the caprice of avarice, selfishness, pride, or unbridled power; that the use of his own hands and limbs are not his own; that he cannot, but at the will of another, find a spot of ground where he can apply them; and that even the gushings from the rock in the wilderness and the manna which descends from heaven are interscepted in their progress to him, and doled out, too often, in reluctant and scanty measure."

"In another house, which we visited, we found the woman of the house had just returned from attending the *accouchement* of a neighbor, the wife of a laboring man; and she told us that when she announced to the father the birth of twins, he received the intelligence with sadness, and replied, that 'it would have been a kinder act if heaven had been pleased to have taken them both away.' Where honest and laborious people, in advanced age, feel constantly that they may be turned adrift, at the caprice of their landlord, from the home of their youth, and where the father regards the birth of a child as a curse, the benevolent mind sees evils in the condition, which it must lament if it cannot remedy, and which it must lament the more, in proportion, as all remedy seems hopeless. The landlord in this case, as I am persuaded, was incapable of committing, knowingly, any act of injustice or unkindness; but it is obvious to what abuses such a power is liable; and to what evils a rela-

* Journal of Royal Agricultural Society, Vol. IV, Part ii. p. 368.

tion of such servile and abject dependence may subject one.

"In the present condition of society in England, no material alteration, however, is to be looked for in the position of the laboring classes. Their lot seems to be sealed, and they must remain in this condition of servility and dependence. They cannot rise above it. They are not slaves; but they are not free. Liberty and dependence, to them, are words without meaning. They have no claims upon their hands, but the iron enters into their souls. Their limbs may be unshackled, but their spirits are bound."

On Preserving Butter.

The following letter appears among the documents accompanying Mr. Ellsworth's late report:

HARTFORD, Jan. 12th, 1845.

Sir:—In answer to your enquiry—"what has been your practice in putting up butter, especially for preservation in hot climates, or long voyages!"—I will cheerfully state, that I have had considerable experience on this subject, and, in some particulars, good success. There are many things required to ensure good butter. The butter itself must be well made—that is, worked enough and not too much, and salted with rock salt. This being well done, and the buttermilk all expelled, the butter may be packed in good white oak (well seasoned) casks, well filled. In cool climates, larger casks can be used. In hot climates, it is best to have small casks—say from twenty-five to thirty pounds; so that too much need not be exposed while using. Then put three small casks into a hogshead, and fill up the same with strong pickle that will bear an egg, and the butter may be shipped from the West Indies or Europe, and kept perfectly sweet. I have never found saltpetre or sugar of any benefit. Butter of my packing has opened as good in the West Indies as it was in Connecticut. I will remark, that to keep butter in ice houses when it remains frozen, will answer, if the butter is to remain in the same temperature; but if it is exposed to warm weather after being taken from the ice, it will not keep so long as if it had not been exposed to so cold a temperature.

Yours respectfully, G. FOX.

The largest tree known in Mexico, and the one on which De Candolle made his estimate of the age of this continent, is a cypress (taxòdium distichum) and is 118 feet in circumference.

The celebrated chestnut on Mount Ætna is 163 feet in circumference, but is evidently composed of five trunks.

A VENERABLE APPLE TREE.—During the heavy blow on Friday, an apple tree standing on the farm of Mr. William P. Wingate, on the Dover Neck road, in this town, was blown down. This venerable tree, from authentic tradition, is supposed to have been two hundred years old: it measured sixteen feet and a half in circumference, and has been known to bear forty bushels of apples a year for a number of years. One year it bore sixty bushels — and it has probably averaged thirty bushels a year for one hundred and fifty years!—*Dover Enq.*

EXTRACTING STUMPS.

We have seen the following very simple plan of stump clearing, adopted with good success:—Take a strong, stiff, hard-wood stick of timber, say fifteen or twenty feet long, and six inches in diameter, cut around the stump, and take off some of the roots; then place the timber upright against the stump, and chain them together strong; from the upper end, which is now in the air, let the chains pass to the axletree of a pair of cart wheels, to the tongue of which a pair of strong oxen are attached; when all is ready, start the oxen along, and the stump "keels over" as easy as you capsize a cabbage in a garden.—*Maine Farmer.*

It appears that the double wild rose, (called the Worthington Rose,) was found on the bank of Kinnitrimick, by Mrs. Crouse, and was cultivated by her. It was brought first to Chillicothe by Col. Madeira, and was cultivated by him, Col. Swearingen, and Mrs. Worthington. We suggest that it be called after the place of its locality,—the Kinnitrimick Rose. This will obviate all injustice, and place the matter in its proper shape.—*West. Farm. & Gard.*

The reason that the Cockle-bur, that great pest on farms, cannot be destroyed by being cut off once a year, is that Nature has provided for its propagation by bestowing on it seed vessels which ripen at two different times of the year. This will be found to be the case on careful examination.—*Western Farm. & Gard.*

Sore Backs or Galls on Horses.—Rub white lead in sweet oil until a good paint is made, and apply a coating of this to the injured place. Milk will do when no oil is to be had. It is one of the most effective applications. Some, for the same difficulty, use a solution of vitriol in water; but in most cases the white lead is preferred.

Mixture for the Rot.—Take common salt, eight ounces; powdered gentian, two ounces; ginger, one ounce; tincture of colombo, four ounces; put the whole in a quart bottle, and fill the bottle with water.